

ABSTRACT OF THE DISCLOSURE

An apparatus and method for differentiating articles in a product stream is described, and which includes an acoustic generator for generating acoustic energy; a plurality of articles located in receiving relation relative to the acoustic energy, and wherein the plurality of articles receive at least a portion of the acoustic energy, and wherein at least some of the acoustic energy received by the plurality of articles is converted into electromagnetic energy; a sensor for detecting at least some of the electromagnetic energy generated by the conversion of the acoustic energy; and a processor operably coupled with the sensor for differentiating the plurality of articles based upon the electromagnetic energy sensed.